

## ABSTRACT

An electrode of a solid oxide fuel cell has a skeleton (11) constituted of a porous sintered compact having a three dimensional network structure, the porous sintered compact being made of an oxide ion conducting material and/or a mixed oxide ion conducting material; grains (12) made of an electron conducting material and/or a mixed oxide ion conducting material are adhered onto the surface of the skeleton; and the grains are baked inside the voids (13) of the porous sintered compact under the conditions such that the grains are filled inside the voids. The electrode drastically improves the electrode properties and alleviates the thermal shock and the thermal strain to a great extent. It is preferable that the electrode is used in the form such that the electrode is formed to be integrated with the electrolyte on one surface or on both surfaces of an oxide ion conducting, dense solid electrolyte layer.